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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,807	06/26/2003	Toshihiko Tsuji	116370	2788
25944	7590	08/27/2004	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			NGUYEN, HUNG	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 08/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/603,807	Applicant(s) TSUJI ET AL.	
	Examiner Hung Henry V Nguyen	Art Unit 2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 8,17,18,27 and 35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-16,19-26 and 28-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/26/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of group I (claims 1-7, 9-16, 19-26, 28-34) in the reply filed on July 7, 2004 is acknowledged. The traversal is on the ground(s) that "a search and examination of the entire application could be made without serious burden". This is not found persuasive because while invention I is explicitly related to an exposure apparatus and corresponding method for controlling the exposure body section if an error occurs in the air conditioning system, invention II is drawn to an exposure method and apparatus for controlling the power of two control systems. As such, the traversal would place serious burden on the Examiner in regard to both search and examination.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the

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reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1, 6-7, and 9, 10, 15, 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Aoki et al (U.S.Pat. 6,304,005).

With respect to claims 1 and 9, and 16, Aoki et al discloses an exposure apparatus and corresponding method comprising all basic features of the instant claims such as: an exposure body section (1) for exposing a predetermined pattern formed on a mask onto a photosensitive substrate; a control system (4) for controlling the operations of the exposure body section, an air conditioning system (3) is placed in a chamber (2) in which the exposure body is housed and a temperature control system for controlling the temperature of the exposure body system in a fixed condition (see col.3, lines 45-63) and there is a power supply shutdown system (18a, 18b) that shuts down a power supply of the control system when an error occurs in the air conditioning system or temperature control system (see col.6, lines 15-37).

As to claim 10, Aoki teaches the power supply shutdown system shuts down a main power supply of the entire exposure system (col.6, lines 25-26).

As to claims 15-16, Aoki discloses that the operation parameters of the apparatus main body and air conditioner are stored at the storage apparatuses (42, 43) at the time the failures/errors occurred in the air conditioning system or in the temperature control system.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-7, 9-16, 19-26, 28-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosugi et al (U.S.Pat. 4,786,947) in view of Aoki et al (U.S.Pat. 6,304,005).

With respect to claims 1-7, 9-16, 19-26 and 28-34, Kosugi et al discloses an exposure apparatus comprising: an exposure body section (see figure 1) for exposing a mask pattern (21) onto a substrate (25); a control system (110) for controlling the operations of the exposure body section and an air conditioning system (77, 80, 85) for controlling the air in a chamber (40) in which the exposure body is housed, and a temperature control system (80, 85) that control a temperature of the exposure body. Kosugi does not expressly disclose a power supply shutdown system having specific functions as recited in the instant claims. As discussed, Aoki et al discloses an exposure apparatus for transferring a predetermined pattern formed on a mask onto a substrate and comprising: an exposure body section (1) for exposing a predetermined pattern formed on a mask onto a photosensitive substrate; a control system (4) for controlling the operations of the exposure body section, an air conditioning system (3) is placed in a chamber (2) in which the exposure body is housed and a temperature control system for controlling the temperature of the exposure body system in a fixed condition (see col.3, lines 45-63); a power supply shutdown system (18a, 18b) that shuts down a power supply of the control system when an error occurs in the air conditioning system or temperature control system (see col.6, lines 15-37). Aoki further teaches that the power supply shutdown system shuts down a main power supply of the entire exposure system (col.6, lines 25-26) and the power supply shutdown system having built in timers (see col.7 lines 16-30) and announcing devices for indicating the error, the

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operating state of the apparatus and the like (see col.5, lines 37-38). Aoki also discloses that the operation parameters of the apparatus main body and air conditioner are stored at the storage units (42, 43) at the time the failures/errors occurred in the air conditioning system or in the temperature control system. In view of such teachings, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate, and to modify the teachings of Kosugi et al and Aoki et al to obtain the invention as specified in the above mentioned claims. It would have been obvious to a skilled artisan to employ the power supply shutdown systems as taught by Aoki into the exposure apparatus of Sosugi in order to provide an interruptible power supply in the exposure apparatus when a failure happens in the air conditioning system or in temperature control system, thus to prevent damages in the exposure apparatus.

Prior Art Made of Record

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hasegawa et al (U.S.Pat. 5,828,572) discloses a processing system having air conditioning control in operation zones; Japanese Document (6-19520) discloses an apparatus for protecting the entire apparatus with an uninterruptible power supply for issuing an operation stop command to each actuator in accordance with a power supply voltage abnormality time and storing data required to actuate the apparatus again upon recovery has been proposed.

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Henry V Nguyen whose telephone number is 571-272-2124. The examiner can normally be reached on Monday-Friday (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Hung Henry V Nguyen
Primary Examiner
Art Unit 2851

hvn
8/23/04